

## **Quantitative Usage Analysis for Thiophanate Methyl**

Case Number: 2680

PC Code: 102001

Date: November 9, 2000

Analyst: Frank Hernandez

Based on available pesticide survey usage information for the years of 1991 through 1999, an annual estimate of thiophanate methyl total domestic usage averaged approximately four hundred fifty thousand pounds active ingredient (a.i.) for about seven hundred fifty thousand acres treated. Thiophanate methyl is a fungicide with its largest markets in terms of total pounds active ingredient allocated to soybeans (24%), sugar beets (17%), wheat (11%), dry beans (10%), apples (9%), almonds (8%), and peaches (6%). Most of the usage is in AR, CA, ID, LA, ND, MN, and MS.

Crops with a high percentage treated of the total U.S. planted acres include peaches (26%), strawberries (21%), apples (14%), sugar beets (12%), almonds (11%), apricots (10%), nectarines (10%), plums (7%), and pecans (6%).

Crops with less than 1 percent of the crop treated include peanuts, soybeans, and wheat.

Site	Acres Grown (000)	Acres Treated (000)		% of Crop Treated		LB AI Applied (000)		Average Application Rate			States of Most Usage
		Wtd Avg	Est Max	Wtd Avg	Est Max	Wtd Avg	Est Max	lb ai/ acre/yr	#appl / yr	lb ai/ A/appl	(% of total lb ai used on this site)
Almonds	430	47	71	10.9	16.4	37	56	0.8	1.1	0.7	CA 100%
Apples	593	86	126	14.5	21.2	40	81	0.5	1.0	0.5	NY VA CA NC 63%
Apricots	19	2	3	10.2	16.7	1	2	0.8	1.0	0.8	CA 84%
Beans, Dry	1,802	44	159	2.5	8.8	45	161	1.0	1.0	1.0	ND MN ID 88%
Beans, Green	304	9	31	3.1	10.1	12	41	1.3	1.0	1.3	WI 91%
Cantaloupes	102	4	5	3.5	5.3	2	3	0.6	1.5	0.4	IN MI TX 75%
Cherries	128	5	9	3.8	7.2	2	3	0.3	1.0	0.3	PA OR CA 86%
Cucumbers	131	2	4	1.8	2.8	2	3	0.7	1.3	0.6	FL GA MI 86%
Melons	27	1	1	2.2	5.5	1	2	1.3	1.2	1.1	TX AZ 75%
Nectarines	29	3	5	10.2	16.3	4	6	1.2	1.4	0.8	CA 79%
Peaches	223	58	82	26.1	36.6	27	54	0.5	1.0	0.5	SC GA TX PA CA AL 82%
Peanuts	1,640	7	79	0.4	4.8	10	116	1.5	1.0	1.5	TX NC OK 84%
Pecans	488	29	76	5.9	15.5	23	62	0.8	1.0	0.8	TX GA 83%
Plums	64	9	14	14.5	21.7	4	7	0.4	1.0	0.4	CA 89%
Pumpkins	45	2	3	4.1	6.5	1	1	0.5	1.2	0.4	CA IL NY 83%
Soybeans	64,371	178	292	0.3	0.5	110	175	0.6	1.0	0.6	LA MS AR TN 81%
Squash	59	2	3	2.9	4.6	1	2	0.7	1.2	0.6	CA FL GA 78%

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Strawberries	50	11	15	21.1	30.7	4	9	0.4	1.0	0.4	CA FL 82%
Sugar Beets	1,459	176	335	12.1	23.0	75	135	0.4	1.0	0.4	MN ND MI ID 85%
Watermelons	258	7	25	2.9	9.7	2	6	0.2	1.0	0.2	IN MO 91%
Wheat	62,407	85	266	0.1	0.4	51	160	0.6	1.0	0.6	WA OR 100%
Total		767	1,186			454	769				

### **COLUMN HEADINGS**

Wtd Avg = Weighted average--the most recent years and more reliable data are weighted more heavily.

Est Max = Estimated maximum, which is estimated from available data.

Average application rates are calculated from the weighted averages.

### **NOTES ON TABLE DATA**

Usage data primarily covers 1991 - 1999. Calculations of the above numbers may not appear to agree because they are displayed as rounded to the nearest 1000 for acres treated or lb. a.i. (Therefore 0 = < 500) to one decimal percentage point for % of crop treated.

SOURCES: EPA data 1991-1999, USDA 1991-1999, and National Center for Food and Agricultural Policy.